

## 62-18 Airbrator Air Abrasion Handpiece (Project 00-28) (5/01)



The Airbrator is a single-use, air abrasion handpiece marketed by Edge Dental. The device attaches to an existing dental unit air line (60-80 psi

recommended) via a handpiece hose adapter/connector and is said to have a patented delivery system that maintains particle flow and minimizes powder overspray. The Airbrator is claimed to have certain advantages over traditional compressor-driven air abrasion units. Among these are that it requires no



maintenance, no refilling, and is disposable. Also, because it is self-contained, it should be simple to set up and not require bulky accessory or auxiliary equipment. The Airbrator is available in three types: 1) Light-Performance Abrasion Polishing and Cleaning (sodium bicarbonate powder) for removing stains and cleaning; 2) Medium-Performance Abrasion for precise abrasion; and 3) High-Performance Abrasion for comprehensive tooth preparation. The manufacturer states that both the Medium- and High-Performance units use 50-micron aluminum oxide. The cutting efficiency of the High

Performance is said to result from using aluminum oxide particles that have more jagged edges produced from a different milling process. The Airbrator starter kit includes three High- Performance Abrasion handpieces, a Medium-Performance handpiece, two Light-Performance handpieces, and a handpiece hose connector.

### Manufacturer:

Edge Dental, Inc.  
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13606 S. West Bay Shore Drive  
Traverse City, MI 49684  
(800) 873-6070  
(231) 946-6070  
(231) 922-2274 FAX  
[www.edgedental.com](http://www.edgedental.com)

### Suggested Retail Price:

\$84.00 Starter Kit  
    3 - High-Performance Airbrators  
    1 - Medium-Performance Airbrator  
    2 - Light-Performance Airbrators  
    1 - Airbrator Connector  
    Instructions  
\$14.95 Individual Airbrators (all performance levels)  
\$5.00 Tip Bending Tool  
\$35.00 Connector  
\$99.95 Box of 10 Airbrators

### Government Price:

\$90.00 Box of 10 Airbrators.

The price for other items listed above is the same as retail price.

### ADVANTAGES:

- + Easy to set up and works well with existing dental units.
- + Does not require bulky or space-occupying compressor unit.

- + Functions well without powder clogging.
- + Single-use enhances infection control and eliminates the need for sterilization.
- + Short learning curve.
- + Works well for small, incipient lesions and the cleaning of pits and fissures.
- + Useful for metal preparation prior to adhesive bonding.
- + Is more conservative in removing tooth structure than higher-pressure, compressor-powered air abrasion units.
- + Instructions are easy to understand.

**DISADVANTAGES:**

- Lacks the power and efficiency of compressor-powered air abrasion units.
- Little clinical difference observed between Medium- and High-Performance handpieces.
- Cost per unit could be excessive for clinics with frequent need for air abrasion.
- As with all air abrasion system, powder overspray obscures treatment area.

**SUMMARY AND CONCLUSIONS:**

The Airbrator Air Abrasion Handpiece is a single-use, self-contained air abrasion handpiece that is powered by the dental unit handpiece hose air pressure. Clinical evaluators reported that the Airbrator was easy to use and presented a minimal learning curve. The unit functioned well with the dental units on which it was evaluated. Although less efficient than compressor-powered air abrasion units, the Airbrator functioned well in the preparation of small, incipient lesions, stain removal, and metal preparation prior to adhesive bonding. As with all air abrasion devices evaluated by DIS, powder overspray is a problem because it is messy and obscures the treatment area. Little clinical difference was seen between the Medium- and High-Performance handpieces. Although the cost-per-unit could be prohibitive for clinics with frequent use of air abrasion, the Airbrator is a viable alternative for clinics with infrequent need for air abrasion. The **Airbrator Air Abrasion Handpiece** is rated **Acceptable** for use by the federal dental services.